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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
35512-35

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	Application Number	Filed
	09/615,026	July 13, 2000

on ___September 9, 2005___

Signature _Jennifer D. Gaines_

Typed or printed name ___Jennifer Gaines___

First Named Inventor
G. Michael Phillips, et al.

Art Unit	Examiner
2676	Rahmjoo, Manucher

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record. **41,338**
Registration number _____

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Joseph G. Swan Signature

Joseph G. Swan
· Typed or printed name

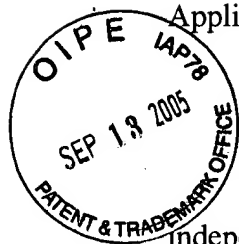(310) 312-2000
Telephone number

September 9, 2005
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☒ *Total of ___1___ forms are submitted.

Appellants' Pre-Appeal Conference Remarks

Claims 1-22 are pending in the application, with claims 1, 12 and 19-22 being the independent claims. Claims 1, 12 and 19-22 stand rejected under 35 USC § 102(e) over U. S. Patent 6,339,747 (Daly); claims 1, 12-17 and 19-22 stand rejected under § 102(b) over a cited National Weather Service map and related Web pages (NWS); and claims 2-11 and 18 stand rejected under § 103(a) over NWS in view of selected pages from a publication by Harvard Graphics (Harvard Graphics).

The Present Invention

Each of the independent claims 1, 12 and 19-22 is directed to information display in which estimated data values are displayed in a graph, with at least one display characteristic being based on calculated measures of the estimates' statistical significances. In this regard, the calculated measure of statistical significance for an estimated data value comprises an estimate of certainty regarding the estimate of the corresponding data value. As noted in the Specification, these measures of statistical significance may be, for example, a sensitivity-based or elasticity-based measure (see page 2, lines 7-8; page 23, lines 1-4; and page 24, lines 30-34), a standard deviation, variance, correlation coefficient, and/or any function of the foregoing (see page 26, lines 4-6). There are a variety of conventional techniques for calculating a measure of statistical significance for one or more estimated data values.

However, a distinguishing feature of the present invention is the way in which such calculated measures of statistical significance are communicated to an end user. The present invention displays each of the plurality of estimated data values using a display characteristic that is a function of the data value's calculated measure of statistical significance. See, e.g., page 24, line 8 to page 26, line 31 of the Specification. Thus, for example, a graph might be produced with each such estimated data value being displayed at an intensity level that is a function of the calculated measure of statistical significance for that data point. *Id.* For instance, estimates having a high statistical significance might be displayed more brightly than estimates having a lower statistical significance. *Id.* In this way, end users often will be able to easily distinguish the more significant points (i.e., the estimates corresponding to a higher certainty) from the less significant points on a displayed (or otherwise provided) graph.

Thus, independent claims 1, 19 and 21 are directed to the display of information, in which one obtains a plurality of estimated data values, each comprising an estimate of a corresponding data value, together with a calculated measure of statistical significance for each. Then, a graph of such plurality of estimated data values is displayed, with each such estimated data value being displayed at an intensity level that is a function of its calculated measure of statistical significance.

Independent claims 12, 20 and 22 are directed to the display of information, in which one obtains a plurality of estimated data values, each comprising an estimate of a corresponding data value, together with a calculated measure of statistical significance for each. Then, a graph of such plurality of estimated data values is displayed, with a display characteristic of each being a function of its calculated measure of statistical significance.

With respect to each of the foregoing independent claims, the calculated measure of statistical significance for an estimated data value comprises an estimate of certainty regarding the estimate of the corresponding data value.

The foregoing combination of features is not disclosed by the applied art. That is, neither Daly nor NWS discloses at least the feature of displaying a graph of a plurality of estimated data values, with a display characteristic of each such estimated data value (e.g., intensity, in independent claims 1, 19 and 21) being a function of a measure of statistical significance calculated for it.

Rejection Over Daly

Daly concerns that the tracking and display of a weather system, such as a storm cell. See, e.g., Daly's Abstract. In addition to displaying the boundaries of a storm cell on a map, Daly also describes the listing of cities that are in the storm's path, together with an estimated arrival time for each city. See, e.g., Figure 3 of Daly.

The current Office Action has asserted that the presently recited "estimated data values" read on Daly's list of cities on a storm's path. However, it is not clear what the Office Action is asserting is the underlying data value or how Daly's listing of a particular city can be said to be an estimate of such underlying data value.

The Office Action also asserts that column 6 lines 20-26 of Daly discloses the feature of obtaining a calculated measure of statistical significance for each estimated data value.

However, as acknowledged in the Office Acton, this cited portion of Daly instead merely generally discusses displaying the current and future path for a storm cell. It says nothing at all about a calculated measure of statistical significance.

Although not entirely clear, it appears that the Office Action then goes on to make different assertions regarding what is alleged to be the "calculated measure of statistical significance" in Daly. These are discussed in turn.

First, the Office Action appears to assert that the presently recited calculated measure of statistical significance reads on Daly's estimated time at which the subject storm will reach a particular city. However, nothing in Daly suggests that Daly's arrival time estimates are calculated measures of statistical significance for the corresponding cities predicted to be in the storm's path. Rather, the displayed arrival times in Daly appear to be just what they say they are: estimates of when the storm will reach the corresponding cities (presumably based on the direction and speed at which the storm is traveling). Moreover, even assuming for the sake of argument that Daly's arrival times could be said to be calculated measures of statistical significance for the corresponding cities, even the Office Action does not allege that any display characteristic of each of Daly's cities is a function of such arrival times.

Next, the Office Action cites column 11 lines 45-60 of Daly as allegedly showing the feature that each estimated data value is displayed at an intensity level that is a function of the calculated measure of statistical significance for such estimated data value. However, this portion of Daly only appears to discuss manual settings for selecting how different storm cell cut-outs are to be displayed. See, e.g., column 11 lines 4-64. Such "cut-outs" may include banners, logos, symbols, etc. See, e.g., column 11 lines 33-44 and column 14 lines 34-43. For example, as described in the portion of Daly cited in the Office Action, the user can select: to have a storm cell cut-out flash on and off as it is displayed (column 11 lines 44-46), how the storm cell cut-out will be justified or framed within the context of the overall map (column 11 lines 47-54), or the color in which the storm cell will be displayed (column 11 lines 55-57).

These manual settings have nothing at all to do with any calculated measure of statistical significance. Moreover, it appears that these manually controlled settings apply to the display of the storm cell cut-out and not to the display of the names of the cities, which allegedly are the "estimated data values" in Daly.

In view of the foregoing remarks, it is apparent that Daly clearly does not disclose the feature of displaying a graph of a plurality of estimated data values, with a display characteristic of each such estimated data value being a function of a measure of statistical significance calculated for it. More fundamentally, the present Office Action does not clearly identify what quantities in Daly the estimated data values are alleged to read on and what quantities in Daly the calculated measures of statistical significance for those estimates are alleged to read on. Accordingly, there is no showing that a display characteristic of the estimated data values is a function of such calculated measures of statistical significance.

Rejection Over NWS

The details of the § 102 rejection over NWS also are unclear. That is, it is difficult to say which portions of NWS the individual claim limitations are alleged to read on.

At the outset, it is noted that the NWS advisory map illustrates a wide geographic region, with different areas within the region being shaded based upon the estimated probability that the center of a particular hurricane will pass within a specified distance of such areas. A key at the top of the NWS's map identifies the probability or probability range (i.e., 10-19%, 20-49%, 50-99% or 100%) corresponding to each shading level used on the map.

Based on these features of the NWS hurricane advisory map, it is clear that both the different shadings and the different stated percentages (or percentage ranges) indicated in the NWS reference for such shadings correspond to exactly the same quantities, i.e., the probabilities that the center of the hurricane will pass within the specified distance of the shaded geographic area.

The probabilities indicated on the NWS hurricane advisory map might fairly be considered to be estimated data values, i.e., estimates of the subject probabilities. However, nothing in NWS even remotely indicates that statistical significances have been calculated for such probabilities. Accordingly, if this reading is adopted, then the display characteristic is based on the estimated data value itself (i.e., different shadings for different probability estimates) and not on any calculated measure of statistical significance for such estimated data values.

Next, apparently based on an alternative reading, the Office Action states,

> . . . see for example the plurality of estimated data values in different
> shadings each corresponding to an estimate of a corresponding data
> value . . .

It is unclear what this quotation means. As best understood by Applicants, it appears to indicate that the Office Action is asserting that the individual geographic points on the map are the "estimated data values". However, this certainly cannot be the case. The geographic points on the NWS map are fixed geographic positions and are not estimates of any underlying data value.

In short, NWS fails to disclose both a plurality of estimated data values and a calculated measure of statistical significance for each (e.g., the probability estimates cannot be both the estimated data values and their own measures of statistical significance). Lacking even this basic disclosure, NWS could not possibly have disclosed that a display characteristic of the estimated data values is a function of the corresponding calculated measures of statistical significance.

The Office Action also mentions a portion of NWS that allegedly discloses:

> . . . during the 72 hours starting at 8:00 AM EDT September 09, 2004 four
> advisory levels with associated numerical (different levels of certainty
> with percentages) and graphical probabilities are provided, all of which
> are based on the past and current values.

It is unclear as to what portion of NWS of the Office Action is referring. However, if the Office Action is asserting that the NWS map periodically is updated, so that the probabilities change over time, then this additional feature (even if disclosed in NWS) would not cure the deficiencies noted above. That is, merely changing probability estimates as new information is obtained does not amount to calculating a measure of statistical significance for those probability estimates. Moreover, such updating still would say nothing at all about displaying individual estimated data values using a display characteristic that is a function of a corresponding calculated measure of statistical significance.

Thus, as with the rejection over Daly, NWS does not disclose the feature of displaying a graph of a plurality of estimated data values, with a display characteristic of each such estimated data value being a function of a measure of statistical significance calculated for it. Once again, the Office Action does not clearly identify what quantities in NWS the estimated data values are alleged to read on and what quantities in NWS the calculated measures of statistical significance for those estimates are alleged to read on. Accordingly, there is no showing that a display characteristic of the estimated data values is a function of such calculated measures of statistical significance.